I claim:

1. Apparatus for use in an access point in a wireless communications environment including multiple access points and stations, wherein stations gain network access by associating with one or more of the access points, comprising:

logic for collecting bid messages from stations, each bid message including a parameter related to the distance between the access point and the station;

logic for sending an accept message to one of the stations from which a bid message was received, the accept message for causing the station to associate with the access point.

- 2. The apparatus of claim 1 wherein the logic for sending an accept message sends an accept message to the station whose bid message included the parameter indicating the largest change in distance.
- 3. The apparatus of claim 2 wherein the accept message is sent only if a maximum number of station associations has not been exceeded.
- 4. The apparatus of claim 1 further comprising logic for maintaining a table including an entry for each station from which a bid message has been received, each entry including the parameter.

5. Apparatus for use in an access point in a wireless communications environment including multiple access points and stations, wherein stations gain network access by associating with one or more of the access points, comprising:

logic for collecting bid messages from stations, each bid message including a parameter related to the distance between the access point and the station;

logic for maintaining a table including an entry for each station from which a bid message has been received, each entry including the parameter.

logic for sending an accept message to the station in the table having the parameter indicating the closest distance, the accept message for causing the station to associate with the access point.